

WHAT IS CLAIMED IS;

1. A radio communicating apparatus comprising:

a receiving and transmitting device configured to receive and transmit a radio signal;

an A/D converter configured to convert said radio signal which has been received into a digital signal and output the digital signal;

a D/A converter configured to convert the digital signal to be transmitted into said radio signal and output the radio signal;

a digital signal processing device configured to perform a digital signal processing for an output of said A/D converter and for an input of said D/A converter; and

a controller configured to control at least one of said receiving and transmitting device, said A/D converter, said D/A converter, and said digital signal processing device by referring to a library comprising a group of software for implementing a predetermined radio facility and executing predetermined software on basic software.

2. An apparatus according to claim 1, wherein

said receiving and transmitting device comprises an analog device configured to perform an analog signal processing, and

said library has a group of software for controlling at least said analog device.

3. An apparatus according to claim 1, wherein

said controller further has

a facility for transferring data, which is generated by operating said predetermined software via said basic software, to a device driver for controlling said receiving and transmitting device.

4. A radio communicating apparatus comprising:

a receiving and transmitting device configured to receive and transmit a radio signal;

an A/D converter configured to convert said radio signal which has been received into a digital signal and output the digital signal;

a D/A converter configured to convert the digital signal to be transmitted into said radio signal and output the radio signal;

a digital signal processing device configured to perform a digital signal processing for an output of said A/D converter and for an input of said D/A converter;

a first memory device configured to store a first library comprising a group of software to implement a predetermined radio facility; and

a controller for, which exists at a portion other than said first library and said radio communicating apparatus, controlling at least one of said receiving and transmitting device, said A/D converter, said D/A converter, and said digital signal processing device by referring to a second library different from said first library and executing predetermined software on basic software.

5. An apparatus according to claim 4, further comprising a second memory device configured to store a predetermined source file and a compiler,

wherein said controller obtains said predetermined software by linking said first and second libraries when said predetermined source file is compiled by using said compiler.

6. An apparatus according to claim 4, wherein

said controller downloads an executable file obtained by compiling a predetermined source file while referring to said second library by a predetermined compiler, thereby obtaining said predetermined software by linking the executable file which is downloaded and said first library.

7. A radio communicating method comprising the steps of:

a first process for receiving and transmitting radio

signal;

a second process for converting said radio signal which has been received into a digital signal and outputting the digital signal;

a third process for converting the digital signal to be transmitted into said radio signal and outputting the radio signal;

a forth process for performing a digital signal process for an output of said second process and a digital signal process for an input of said third process; and

a fifth process for controlling at least one of said first process, said second process, said third process, and said forth process by referring to a library comprising a group of software for implementing a predetermined radio facility and executing predetermined software on basic software.

8. A recording medium storing a computer-readable program, wherein

said program comprises the steps of:

a first process for executing predetermined software by referring to a library comprising a group of software to implement a predetermined radio facility; and

a second process for controlling any one of a facility for receiving and transmitting radio signal by said

predetermined software executed by said first process, a facility for converting said radio signal which has been received into a digital signal and outputting the digital signal, a facility for converting the digital signal to be transmitted into said radio signal and outputting the radio signal, and a facility for performing a digital signal process for said digital signal.

9. A computer-readable recording medium recording a program described without depending on analog hardware, wherein

said program allows a receiving and transmitting process for a radio signal by referring to a library serving as a program described by depending on said analog hardware for executing the receiving and transmitting process for receiving and transmitting said radio signal so as to control said analog hardware.

10. An apparatus according to claim 1, wherein

said receiving and transmitting device comprises an analog device configured to perform an analog signal process and a digital device configured to perform a digital signal process, and

said controller for, in the case where a same facility can be implemented by both of said analog device and said digital device, selecting one of said analog device and said

digital device and accomplishing the facility or preferentially selecting one of said analog device and said digital device and accomplishing the facility.

11. An apparatus according to claim 10, wherein the selection by said controller is executed using said software by referring to said library.

12. An apparatus according to claim 1, wherein said receiving and transmitting device comprises an analog device configured to perform an analog signal process and a digital device configured to perform a digital signal device,

a specification storing portion for storing information regarding a specification is provided to at least one of said analog device and said digital device, and said controller reads said information regarding the specification and executes said control operation on the basis of the read information.

13. A radio communicating apparatus comprising:

hardware including an analog device and having a receiving and transmitting device configured to receive and transmitting a radio signal;

an application which runs on basic software depending

on said hardware and has a group of commands for receiving and transmitting said radio signal; and

a library for enabling said hardware to be controlled by said application, even if said group of commands which said application has do not depend on said hardware, by converting the group of commands, which depends on said hardware and which said application has, into the group of commands for controlling said hardware.

14. A radio communicating apparatus comprising:

a receiving and transmitting device, including an analog device, for receiving and transmitting radio signal;

a processor for digitally controlling said receiving and transmitting device;

an operation system which operates on said processor;

an application which runs on said operation system;

and

a library for converting a command based on said application and a command for controlling said receiving and transmitting device.